

Remarks

In view of the foregoing amendments and the following remarks, reconsideration and withdrawal of the outstanding Office Action rejections is respectfully requested.

Claim Objections and Amendments

Claim 10 has been amended to remove the claim limitations regarding inhibitors of the AXL gene or ligand gene. Additionally, Applicants note that the Examiner has objected to claim 10 for a typographical error. Accordingly, claim 10 has been amended to replace “us” with “is” in the “wherein” clause. No new matter has been added.

Claim 38 has been amended to specify that the inhibitor of the AXL protein ligand inhibits the interaction between the AXL protein and GAS6. There is written description support for this amendment in the specification as filed at least at p. 4, last para. through p. 5, first para. No new matter is added.

Claim Rejections under 35 USC § 112, first paragraph; Enablement

The Examiner has rejected claims 10-14, 17-21 and 35-39 under 35 USC § 112, first paragraph for lacking enablement. As to independent claim 10, the Examiner has essentially reiterated his reasoning for the rejection from the prior Office Action, and applied the same reasoning to new claims 37-39.

However, Applicants note that the Examiner concedes the specification does enable a method for reducing the invasivity of prostate cancer cells by administering an anti-AXL antibody (Office Action, para. spanning pp. 2-3). This is essentially the

embodiment to which claim 39 is directed. Thus, the Examiner's rejection of claim 39 seems to be an error, and Applicants request that it be withdrawn.

Regarding the remaining claim rejections, Applicants note that the Examiner rejects the embodiments regarding the inhibition of AXL gene expression, and administration of an inhibitor of the AXL gene or of an inhibitor of the AXL ligand gene. Applicants disagree with the Examiner's interpretation of the claims. However, solely in the interest of expediting prosecution, Applicants have amended claims 10 and 38, as discussed above. As a result of these amendments, the rejected embodiments have been removed from the claims. Accordingly, this rejection has been obviated and should be withdrawn.

Claim Rejections under 35 USC § 112, first paragraph; Written Description

The Examiner has rejected claims 10-14, 17-20 and 35-38 under 35 USC § 112, first paragraph, for failing to comply with the written description requirement. The Examiner argues that the claims are drawn to an "inhibitor of the AXL protein" which encompasses a huge genus of compounds with different structures and functions, and the specification does not adequately describe this genus of agents, and that it specifically does not provide the structure or the structure-function correlation of these inhibitors.

Applicants disagree with the Examiner's interpretation of the claims. However, as discussed above, Applicants have amended the claims solely to expedite prosecution. With these amendments, the limitation regarding the AXL protein ligand has been more

clearly articulated, and the written description support for this limitation has been clearly defined. As such, this rejection has been obviated and should be withdrawn.

Claim Rejections under 35 USC § 102(b)

The Examiner has rejected claims 10, 11, 18, 20, 35 and 37 under 35 USC § 102(b) as being anticipated by Orum (WO 01/48190). In addition, the Examiner has rejected claims 10-14, 18-20 and 35-39 under 35 USC § 102(b) as being anticipated by Burmer (WO 01/30964). Orum is directed to the use of locked nucleic acids to modify anti-sense oligonucleotides to various genes, including the AXL gene. Burmer is directed to isolated nucleic acids and proteins associated with cancer. The Examiner argues that these references disclose all of the claim limitations except the method of reducing the invasivity of cancer cells. However, the Examiner essentially argues that reducing invasivity would be an inherent property of each of the disclosed methods, and, therefore, these references anticipate the rejected claims. Applicants traverse.

For a prior art reference to inherently disclose a claim limitation, that limitation must necessarily flow from practicing the claimed method. However, neither practicing the method of Orum, nor practicing the method of Burmer, would necessarily result in the reduction of invasivity of cancer cells. Therefore, these references do not inherently disclose the claim limitation regarding reducing the invasivity of cancer cells. In addition, independent claim 10 is directed to a method of reducing the invasivity of cancer cells in a subject in need of such treatment. Orum and Burmer are also silent as to this aspect

of claim 10. Further, practicing the methods of either Orum or Burmer would not necessarily result in reducing the invasivity of cancer cells in a subject in need of such treatment. As such, neither Orum nor Burmer inherently disclose the "in need thereof" limitation of independent claim 10.

Furthermore, Orum is exclusively directed to nucleic acids used to modify the function of various genes. Since the amended claims, particularly independent claim 10, are no longer directed to nucleic acids, the disclosure in Orum is not relevant to an anticipation or obviousness analysis. Therefore, this rejection has been obviated and should be withdrawn.

Claim Rejections under 35 USC § 103(a)

The Examiner has rejected claims 10-12, 14, 18, 19, 35, 36, 38 and 39 under 35 USC § 103(a) as being obvious over Liu (US Patent No. 5,468,634) in view of Hudziak (WO 89/06692), Schneider (US Patent No. 5,538,861) and Jacob (Cancer Detection and Prevention 1999, 23:325-332). The Examiner argues that each reference discloses various claim limitations, and that one of skill in the art would have known to combine the references to arrive at the presently claimed subject matter, thus rendering these claims obvious. However, as with the anticipation rejections discussed above, the Examiner concedes that none of the cited references discloses the reducing invasivity limitation and again relies on inherent disclosure in making the rejection. Applicants traverse.

As with the references cited in conjunction with the anticipation rejection, practicing the methods cited here would not necessarily result in the reduction of invasivity of cancer cells. Therefore, these references do not inherently disclose the claim limitation regarding reducing the invasivity of cancer cells, and, consequently, the disclosures in these references, whether considered alone or in combination, cannot render obvious the present claims. This rejection should be withdrawn.

In view of the foregoing, it is submitted that the present application is now in condition for allowance. Reconsideration and allowance of the pending claims are requested. The Director is authorized to charge any fees or credit any overpayment to Deposit Account No. 02-2135.

Respectfully submitted,

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